Amendments to the Claims

On page 1, please amend the title of the application as follows:

-- [[DEVICE SYSTEM]] DEVICE, SYSTEM AND METHOD OF BASE STATION IDENTIFICATION IN AN IDLE STATE --

Amendments to the Claims

The following listing of claims replaces all prior versions and listings of claims in the application:

1. (Currently Amended) A method comprising:

~~determining, during a base station monitoring procedure in an idle state of a communications device, if a signal transmitted by a base station currently transmitting data to said communications device is received at said communications device according to an adequate quality, and,~~

~~if the signal received is not of an adequate quality, determining if a signal transmitted by at least one other base station in a list of identified base stations is received according to an adequate quality at said communications device, and,~~

~~if a signal of adequate quality of at least one other base station is not received at said communications device, performing a base station identification procedure.~~

in a non-idle state of a wireless communication device, receiving from a base station a signal representing a list of cells; and

in an idle state of said wireless communication device:

determining whether the list of cells includes an identification of one or more neighboring cells of said wireless communication device;

if the list does not include an identification of one or more neighboring cells of said wireless communication device, searching for neighboring cells by operating a Radio Frequency receiver to scan one or more channels during a first search period, and performing an offline multi-path search for one or more neighboring base stations after the first search period expires; and

if the list includes an identification of one or more neighboring cells of said wireless communication device, searching for neighboring cells by operating the Radio Frequency receiver to scan one or more selected channels during a second search period, and performing an offline multi-path search for one or more neighboring base stations after the second search period expires.

wherein the second search period is shorter than the first search period,
and wherein scanning the one or more selected channels during the second search period comprises scanning channels associated with the one or more neighboring cells included in said list.

2. (Currently Amended) The method of claim 1, ~~wherein said~~ comprising performing a base station identification procedure during at least one of the first and second search periods ~~includes a base station search~~.

3. (Currently Amended) The method of claim 1, ~~wherein performing said base station identification procedure comprises:~~ comprising:
in the idle state of said wireless communication device,
if a first time interval has passed, performing a first type of base station identification procedure ~~for a first time period~~ by searching for one or more previously-identified base stations of neighboring cells, and
if a second time interval, which is longer than said first time interval, has passed, ~~the second time interval being longer than the first time interval,~~ performing a second type of base station identification procedure by searching for one or more base stations that have not been previously identified. ~~for a second time period, the second time period being longer than the first time period.~~

4. (Currently Amended) The method of claim 3, wherein performing said second type of base station identification procedure ~~for a second time period~~ comprises performing an extended base station identification procedure.

5. (Currently Amended) The method of claim 3, comprising determining at an initial time interval, the initial time interval being shorter than said first time interval, if a signal received from at least one other base station in a list of identified base stations is received according to an adequate quality at said wireless communications device, and,
if said at least one other signal of adequate quality is not received by said wireless communications device, performing a base station identification procedure.

6. (Currently Amended) The method of claim 5, wherein performing a base station identification procedure comprises performing a ~~limited~~ base station identification procedure for a third search period, which is shorter than the second search period.

7. (Currently Amended) The method of claim 1, ~~comprising~~ wherein searching for neighboring cells in the idle state comprises:
~~determining signal quality adequacy of a signal received from an identified base station by comparing the~~
searching for neighboring cells in the idle state if it is determined that a value of a signal quality indicator of a signal received from an identified base station [[to]] is lower than a predetermined threshold.

8. (Currently Amended) An [[apparatus,]] apparatus comprising:
~~a controller capable of determining, during a base station monitoring procedure in an idle state of a mobile device, if a signal transmitted by a base station currently transmitting data to said mobile device is received according to an adequate quality, and,~~
~~if the signal received is not of adequate quality, determining if at least one other base station in a list of identified base stations transmits a signal which is received according to an adequate quality, and,~~

~~if said at least one other base station does not transmit a signal which is received according to an adequate quality, performing a base station identification procedure.~~

a Radio Frequency receiver to receive from a base station, in a non-idle state of a wireless communication device, a signal representing a list of cells; and

a controller,

wherein in an idle state of said wireless communication device:

the controller is to determine whether the list of cells includes an identification of one or more neighboring cells of said wireless communication device;

if the list does not include an identification of one or more neighboring cells of said wireless communication device, the controller is to search for neighboring cells by operating a Radio Frequency receiver to scan one or more channels during a first search period, and to perform an offline multi-path search for one or more neighboring base stations after the first search period expires; and

if the list includes an identification of one or more neighboring cells of said wireless communication device, the controller is to search for neighboring cells by operating the Radio Frequency receiver to scan one or more selected channels during a second search period, and to perform an offline multi-path search for one or more neighboring base stations after the second search period expires,

wherein the second search period is shorter than the first search period,

and wherein the controller is to scan the one or more selected channels during the second search period by scanning channels associated with the one or more neighboring cells included in said list.

9. (Original) The apparatus of claim 8, wherein said controller is capable of scanning a set of SYNC channels for further base stations.

10. (Currently Amended) The apparatus of claim 9, wherein the controller is capable of, if a first interval has passed, scanning a first set of SYNC channels ~~for a first time period~~, and is capable of, if a second interval has passed, the second interval being longer than the first interval, scanning a second set of SYNC channels ~~for a second time period, the second time period being longer than the first time period~~.

11. (Currently Amended) The apparatus of claim [[9]] 8, wherein the controller is capable of performing an extended base station identification procedure during said second ~~time~~ search period.

12. (Original) The apparatus of claim 8, wherein said controller is capable of determining signal quality adequacy according to a predetermined threshold.

13. (Currently Amended) The apparatus of claim [[8]] 10, wherein said controller is capable of determining, at an initial interval, the initial interval being shorter than said first interval, if at least one other base station in a list of identified base stations transmits a signal which is received according to an adequate quality,
and is capable of, if said at least one other signal of adequate quality is not received, scanning a set of SYNC channels for further base stations.

14. (Original) The apparatus of claim 13, wherein said scanning a set of SYNC channels for further base stations comprises performing a limited base station identification procedure.

15. (Currently Amended) A system, comprising:
a dipole antenna; ~~and~~
~~a controller capable of determining, during a cell monitoring procedure in an idle state of a mobile device, if a signal transmitted by a base station currently~~

~~transmitting data to said mobile device is received according to an adequate quality, and,~~

~~if the signal received is not of an adequate quality, capable of determining if at least one other base station in a list of identified base stations transmits a signal which is received according to an adequate quality, and,~~

~~if said signal of adequate quality is not received, capable of performing a base station identification procedure.~~

a Radio Frequency receiver to receive from a base station, in a non-idle state of a wireless communication device, a signal representing a list of cells; and

a controller,

wherein in an idle state of said wireless communication device:

the controller is to determine whether the list of cells includes an identification of one or more neighboring cells of said wireless communication device;

if the list does not include an identification of one or more neighboring cells of said wireless communication device, the controller is to search for neighboring cells by operating the Radio Frequency receiver to scan one or more channels during a first search period, and to perform an offline multi-path search for one or more neighboring base stations after the first search period expires; and

if the list includes an identification of one or more neighboring cells of said wireless communication device, the controller is to search for neighboring cells by operating the Radio Frequency receiver to scan one or more selected channels during a second search period, and to perform an offline multi-path search for one or more neighboring base stations after the second search period expires;

wherein the second search period is shorter than the first search period,

and wherein the controller is to scan the one or more selected channels during the second search period by scanning channels associated with the one or more neighboring cells included in said list.

16. (Currently Amended) The system of claim 15, wherein the controller, if a first interval has passed, is capable of scanning a first set of SYNC channels ~~for a first time period~~, and if a second interval has passed, the second interval being longer than the first interval, is capable of scanning a second set of SYNC channels ~~for a second time period, the second time period being longer than the first time period~~.

17. (Currently Amended) An article comprising a computer readable storage medium having stored thereon instructions that, when executed by a processing platform, result in:

~~determining during a base station monitoring procedure in an idle state of a communications device, if a signal from a base station currently transmitting data to said communications device is received by said communication device according to an adequate quality;~~

~~if said signal received is not of adequate quality, determining if at least one other base station in a list of identified base stations transmits a signal which is received by said communication device according to an adequate quality; and~~

~~if said at least one other base station does not transmit a signal which is received by said communication device according to an adequate quality, scanning a set of SYNC channels for further base stations.~~

in a non-idle state of a wireless communication device, receiving from a base station a signal representing a list of cells; and

in an idle state of said wireless communication device:

determining whether the list of cells includes an identification of one or more neighboring cells of said wireless communication device;

if the list does not include an identification of one or more neighboring cells of said wireless communication device, searching for neighboring cells by operating a Radio Frequency receiver to scan one or more channels during a first search period, and performing an offline multi-path search for one or more neighboring base stations after the first search period expires; and

if the list includes an identification of one or more neighboring cells of said wireless communication device, searching for neighboring cells by operating the Radio Frequency receiver to scan one or more selected channels during a second search period, and performing an offline multi-path search for one or more neighboring base stations after the second search period expires,

wherein the second search period is shorter than the first search period,

and wherein scanning the one or more selected channels during the second search period comprises scanning channels associated with the one or more neighboring cells included in said list.

18. (Currently Amended) The article of claim 17, wherein the instructions, when executed by the processing platform, result in,

if a first interval has passed, scanning a first set of SYNC channels ~~for a first time period~~, and

if a second interval has passed, the second interval being longer than the first interval, scanning a second set of SYNC channels ~~for a second time period, the second time period being longer than the first time period~~.

19. (Original) The article of claim 17, wherein the instructions, when executed by the processing platform, result in determining signal adequacy according to a predetermined threshold.

20. (Currently Amended) A method comprising:

~~during a base station monitoring procedure in an idle state of a communication device, at a base station evaluation interval, performing a multi-path search to determine whether at least one identified neighboring base station transmits a signal which is received by said communication device according to an adequate quality.~~

in a non-idle state of a wireless communication device, receiving from a base station a signal representing a list of cells; and

in an idle state of said wireless communication device:

determining whether the list of cells includes an identification of one or more neighboring cells of said wireless communication device;

if the list does not include an identification of one or more neighboring cells of said wireless communication device, searching for neighboring cells by operating a Radio Frequency receiver to scan a first set of SYNC channels during a first search period, and performing an offline multi-path search for one or more neighboring base stations after the first search period expires; and

if the list includes an identification of one or more neighboring cells of said wireless communication device, searching for neighboring cells by operating the Radio Frequency receiver to scan a second set of SYNC channels during a second search period, and performing an offline multi-path search for one or more neighboring base stations after the second search period expires,

wherein the second search period is shorter than the first search period,

and wherein scanning the second set of SYNC channels during the second search period comprises scanning channels associated with the one or more neighboring cells included in said list.

21. (Currently Amended) The method of claim 20, comprising,

~~in the case where the received signal from~~

if a result of said multi-path search does not meet a selected criterion,

performing a base station identification procedure.

22. (Original) The method of claim 20, comprising executing said multi-path search over a buffer of recorded samples.

23. (Currently Amended) The method of claim 20, comprising, at a second interval being greater than said base station evaluation procedure interval, performing an extended base station identification procedure.

24. (Currently Amended) The method of claim 20, comprising at a base station measurement interval:

performing a multi-path search;

evaluating the results of said multi-path search; and

if signals being received to said wireless communication device do not meet pre-selected criteria, performing a base station identification procedure.